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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,018	12/20/1999	ARNE LUNDBACK	2380-140	1850

7590

05/28/2004

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/467,018

Applicant(s)

LUNDBACK ET AL.

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 8 and 14 is/are rejected.
- 7) ☒ Claim(s) 2-7, 9-13 and 15-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21/20/99 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. PCT/IB98/02080.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to application 09/467,018 filed 12/20/99, claims 1-20 have been examined and remain pending.

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The received certified copy has been filed in parent Application No. PCT/IB98/02080, filed on December 18, 1998.

3. The drawings are objected to because of the following informalities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance (see MPEP §1.85 revised, 65 FR 54604, Sept. 8, 2000, effective Nov. 7, 2000; para. (a) revised, 65 FR 57024, Sept. 20, 2000, effective Nov. 29, 2000). In this case, written description on page 1, lines 11-21 makes reference to a telecommunication platform 20, not shown on this figure, also noted with respect to on Figure 2, written description on page 9, lines 15-19, describe a cluster support function 50 and an Internet Protocol (IP) handler 100, however on the figure the reference numbers seem to be inverted, i.e. 50 is for the handler and 100 is for the support. Applicant is urged to carefully review the disclosure in its entirety for any further inconsistency. Correction is required.

4. Claims 2, 9 and 15 objected (3-7, 10-13, and 15-20 by virtue of dependency) to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhaskaran U.S. Patent No. 6,266,335

Regarding claims 1 and 8, Bhaskaran teaches substantial features of the invention as claimed, teaching

a cluster of processor collectively performing (“platform processing”) service functions (col 1/lines 15-27 and col 3/lines 53-57) and having capabilities (see col 1/lines 22-33 or col 3/lines 64 to col 4/line 1, e.g. service related);

the cluster of processors running on a platform (col 3/line 53-61) and executing service related applications (col 1/lines 15-27); plural processors of the cluster having respective Ethernet interface ports (“IP interface”) (col 7/lines 21-25); plural processors of the clusters have the same IP address (Fig. 2 showing address 290 and col 5/lines 51-56);

a router (“Internet Protocol (IP) handler”) distributing (“IP frames”) data frames throughout the cluster to the plural processors having the same IP address (col 5/lines 49-51 and col 7/lines 21-50);

receiving frames from outside the cluster of processors by the router via any one of the plural Ethernet interface ports (col 3/lines 49-57 and col 7/lines 21-25);

routing (“forwarding”) the received frames to (“correct”) one of the plural processors executing an (“IP software”) application to an Ethernet interface port destined for receiving said frames (col 1/lines 54-58, col 4/lines 14-15, 25-26, 61-61, col 7/lines 21-50, and col 5/lines 49-51) however, although prior art does not explicitly teach wherein the frames forwarding the received frame to a particular one of the plural processors, this processor is not denoted “the correct one”.

It would have been obvious to one ordinary skilled in the art at the time the invention was made given the teachings of improving the prior art augmenting a service provider by using multiple servers having a single IP address in a clustering fashion. Bhaskaran teaches forwarding the received frame destined to all servers having the same IP address to a particular one of the plural processors based on the IP interface, including selected optionally by a router using load balancing. It would be obvious to one ordinary skilled in the art the forwarding the received frame to one of the plural processors based on the IP interface of the frames or based on the load balancing scheme to compensate for varying traffic, and enabling the addition and removal of IP server, as suggested by the reference.

Regarding claim 14, this claim comprises limitations substantially the same as those discussed on claim 1, same rationale of rejection is applicable. Further limitation(s) recite, selecting one of the plural of Ethernet interface distributing data frames to one of the plural of processors of the cluster without the knowledge of which one of the processors of the cluster is hosting an IP software application (Bhaskaran: i.e. routing (“forwarding”) the received frames to one of the plural processors executing an (“IP software”) application to an Ethernet interface port destined for receiving said frames (col 1/lines 54-58, col 4/lines 14-15, 25-26, 61-61, col 7/lines 21-50, and col 5/lines 49-51).

Pertinent Prior Art:

7. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinence is presented in accordance with MPEP§ 707.05. Copies of documents cited will be provided as set forth in MPEP§ 707.05(a):

Davies et. al. U.S. Patent No. 6,108,701

Davies et. al. teach plural processors collectively performing a function (abstract, col 2/lines 30-31); the plural processors having Internet related capabilities (abstract, col 2/lines 30-47, col 5/lines 22-25); the plural processor having respective Ethernet interfaces (col 2/lines 60-34 and col 4/lines 55-60); an Internet Protocol handles distributed throughout the cluster whereby the plural processors have a same IP address (i.e. plural processor have the same IP address see col 2/lines 30-36); forwarding ("IP frames") data framers from outside the platform (e.g. from the remote computers) addressed to the same IP address received on any Ethernet interface to one of plural processors (col 2/lines 43-47, 60-64, col 4/lines 10-22, col 5/lines 22-35).

Fisher et. al. U.S. Patent No. 6,370,583

Fisher et. al. teach plural processors 110 in a cluster running respective application processes 220 (Fig. 1-2A); an interface communicated frames from outside the platform where the plural processors are running application processes, e.g. the network and forward the frames directly to only one of the processors from the plural processors, particularly, to a destination processor.

U.S. 6,205,479

Dulai et. al. teach multiple application sharing the same IP address, each application having a distinct port via which packets having the appropriate port and IP address of the server are routed to respective application.

U.S. 6,006,259

Adelman et. al. teach a plurality of computers in a IP network cluster having assigned all cluster members the same Internet machine name and IP address, whereby all cluster members can receive all messages arriving at the cluster and all messages passed on by the members of the cluster appear to come form a single unit, and to allow to communicate with each other.

8. Applicant is reminded of 37 CFR 1.530 (e) Status of claims and support for claim changes. Whenever there is an amendment to the claims pursuant to paragraph (d) of this section, there MUST also be supplied, on pages separate from the pages containing the changes, the status (i.e., pending or canceled), as of the date of the amendment, of all patent claims and of all added claims, and an explanation of the support in the disclosure of the patent for the changes to the claims made by the amendment paper (see MPEP 2234). There is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed, Wertheim, 541 F.2d at 262, 191 USPQ at 96; however, with respect to newly added or amended claims, applicant should show support in the original disclosure for the new or amended claims. See MPEP § 714.02, and 2163.06. ("Applicant should specifically point out the support for any amendments made to the disclosure.") (see MPEP § 2163.04).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (703) 305-9705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231


or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry;

Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".



B. Prieto
Patent Examiner